



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/510,281

10/19/2005

Dae-sik Kim

Q83811

7534

23373 7590 08/07/2007
SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER

DOWLING, WILLIAM C

ART UNIT

PAPER NUMBER

2851

MAIL DATE

DELIVERY MODE

08/07/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/510,281

Applicant(s)

KIM ET AL.

Examiner

William C. Dowling

Art Unit

2851

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6/18/07
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-110 is/are pending in the application.
- 4a) Of the above claim(s) 1-34, 50-55, 74-81 and 96-110 is/are withdrawn from consideration.
- 5) ☒ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 35-44, 56-59, 62-64, 72, 73, 82-86 and 89-92 is/are rejected.
- 7) ☒ Claim(s) 45.47-49, 60-61, 65-71 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 6604
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claim 46 is objected to because of the following informalities: Claim 46 has no remaining dependence. Appropriate correction is required.

Election/Restrictions

2. Claims 1-34, 50-55, 74-81, 96-110 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Group, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 6/18/07.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. Claims 35-40, 41-44, 56-59, 72-73, 82-86 are rejected under 35 U.S.C. 102(a) as being anticipated by Lambert (6,288,815).

Lambert discloses a projection system comprising:

a light source;

a color separator which separates an incident beam according to color;

Art Unit: 2851

a scrolling unit, comprising at least one lens cell, which converts the rotation of the lens cell into a rectilinear motion of an area of the lens cell through which light passes so that an incident beam is scrolled, the scrolling unit including a spiral lens disk (35) figure 7B,

a light valve (not shown)which processes a beam transmitted by the color separator and the scrolling unit according to an image signal and which forms a color picture,

a projection lens unit which magnifies the color picture formed by the light valve and which projects the magnified color picture onto a screen, and

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 64, 92 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lambert (6,288,815).

7. The general placement of a prism within the light path is deemed an obvious modification because it is well known that prism may be used to alter a light path.

8. Claims 62, 89-90 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lambert in view of Shibatani (6,332,684).

Art Unit: 2851

Lambert discloses the invention substantially as claimed but does not teach the specific color separation means.

Shibatani teaches the use of angled dichroic mirrors to separate colored light.

It also would have been obvious to one skilled in the art at the time of the invention to modify the device of Lambert by the substitution of a different type of color separation means, such as taught by Shibatani et al. because each would function as a means to form separated color beams.

9. Claim 63,91 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lambert in view of Kanayama et al. (2003/0095213).

Lambert disclose the invention substantially as claimed but do not teach the formation of color separation means of parallel dichroic reflection surfaces

Kanayama et al. teaches such a color separation structure with structure (5) which is formed of three prisms with dichroic filter surfaces .

It would have been obvious to one skilled in the art at the time of the invention to modify the device of Lambert and by the substitution of a different type of color separation means, such as taught by Kanayama et al. (2003/0095213), because each would function as a means to form separated color beams.

Allowable Subject Matter

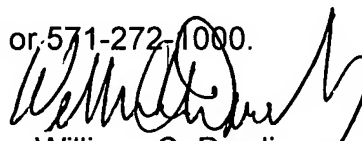
10. Claims 45, 47-49, 60-61, 65-71 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 2851

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William C. Dowling whose telephone number is 571-272-2116. The examiner can normally be reached on MON-THURS.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diane Lee can be reached on 571-272-2399. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


William C. Dowling
Primary Examiner
Art Unit 2851

wcd